

## Monitoring of the uptime of Linux Systems

This how-to describes how Linux uptime can be monitored using OpenScape FM (via System Management PlugIn, tested with OSFM V11R0.01.13). Prerequisite is that SSH login on the target system is possible and you have valid account data (username, password).

The first step is the creation and activation of a new monitoring profile to measure the uptime.

1) Show the list of available system management agents

<b>9</b> Unify			
🖡 Client ★ Favorites 🔤 S @ Network Topol 🔍	erver 🏶 IP Manager 🐔 Te 📋 💩 🖛 🛸 🗖 💥	chnologies 🕤 SNMP 📑 MAR	<ul> <li>System Management</li> <li>Monitoring Profile</li> </ul>
Network Topology		Properties Fulltext Sev	Show Agents Monitored Hosts
▶ <sup>(1)</sup> 10.22.17.0 ▶ <sup>(1)</sup> 10.22.18.0		Acknowledged	Show Monitors Show Parameter
		Correlated All	Monitoring Functions
139.2.48.0		Severity Date	Software Update
<ul> <li>         192.168.168.0     </li> <li>         192.168.169.0     </li> </ul>		Normal 11/20/2020 1	Agent Account

2) Select an agent and click on "Create Monitoring Profile"

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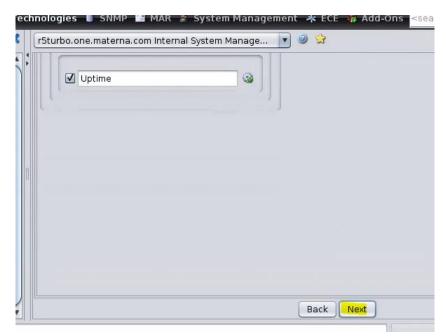
Agent Status	Agent Host	Server IP	Version
Normal	💀 🖣 r5turbo.one.materna.com	139.2.61.55	11 R0.Dev2020-11-20 (
Unmanaged	aventador.one.materna	139.2.60.128	@CCM VERSION@



3) Select the uptime monitor and move It to the list of selected objects on the right, then click "Next"

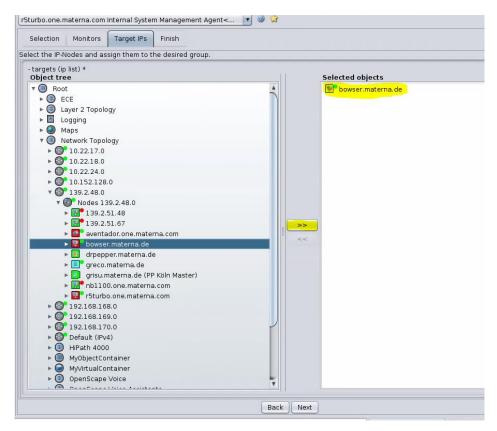
r5turbo.one.materna.com Internal System Management Agent<> 💌 🥹 😒	۵۵ 🗋
Selection Monitors Target IPs Finish	
Select one or more templates for the new monitoring functions.* Object tree Selected (	objects
	o.one.materna.com Profiles-Monitor/Uptime *
Applications	
▶ Database	
Examples	
▶ 🔘 Network Monitoring	
v 🔘 os	
T D Linux	
Einux Cluster *	
Services *	
Execute Command *	
▶	
System Monitoring	
▶	
▶ 📵 test	
Description	
Uptime Monitors the system uptime in days via SSH.	
Monitors the system uptime in days via 55H.	
Back Next	

4) On this page, just click "Next"





5) On the next page, select the system which should be monitored in the tree on the left side. Move it to the list of selected objects on the right



6) On the next page, enter a name or just leave the default as it is. The click "Save & Activate"

r5turbo.one.materna.com Internal System Manage 💽 🥥 😒
Selection Monitors Target IPs Finish
Pressing <b>Save And Activate</b> will activate the new configuration file on the agent. Pressing <b>Save As Template</b> will save the new configuration in the folder templates/Custom without activating it.
Name
Uptime
Short Description
Monitors the system uptime.
Comment
Save & Activate Save As Template (Custom) Cancel
Back Next



The next step is the configuration of username and password so that the uptime monitor can access the target system via SSH. To do so, locate the target host you have selected in the previous step 5), in this example the host "bowser.materna.de". An easy way to find it is the global search.

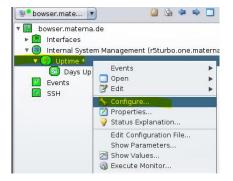
1) Locate the host via global search. The row with type "Host" is the object we are looking for:

root<>Search 💽 🥹 🗳		
Object	Туре	Internal Object Name
🐠 🖫 📍 bowser. materna. de	Host	IPNode:139.2.49.114
3873: IP Manager "bowser.materna.de lo [127.0.0.2]" Link Down,	Event	Event:3873
🜒 🖉 4406: IP Manager "bowser.materna.de lo [127.0.0.2]" Link Down,	Event	Event:4406
4407: IP Manager "bowser.materna.de eth0" Link Down, Interface	Event	Event:4407
🧶 🕾 📍 bowser. materna. de	Parameter	SSMAParameter:139.2.61.55:3042:D
🥑 🎢 bowser.materna.de	Parameter	SSMAParameter:139.2.61.55:3042:R
∂ﷺ bowser.materna.de MIB II	Parameter	SSMAParameter:139.2.61.55:3042:R
🥑 🎢 bowser.materna.de SNMP	Parameter	SSMAParameter:139.2.61.55:3042:R
	Parameter	SSMAParameter:139.2.61.55:3042:R
J Interface-0 <-> bowser.materna.de	Meta Connection	Meta:TMExternal:127.0.0.1:52555:56
anterface-1 <-> howser materna de	Meta Connection	Meta-TMExternal-127.0.0.1-52582-56

2) Right-Click on the host entry and select "Open->Tree" to show the host and it's subcomponents on the left side

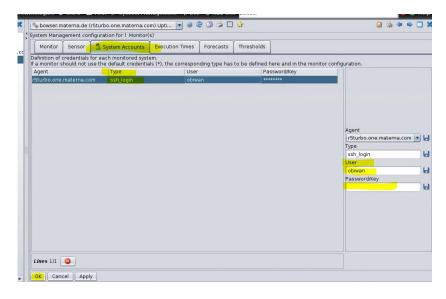
root<>Search		0 2 1 2 2		
Object		Туре		Internal Object Name
🐠 😨 📍 bowser. materna. de		Host		IPNode:139.2.49.114
93873: IP Manager "bowse	Events		•	Event:3873
9🥝 4406: IP Manager "bowse	Open 🛛		•	👁 Object Search
●② 4407: IP Manager "bowse	🕑 Edit		►	Submap
🔵 🌁 🕈 bowser.materna.de	New		•	Tree
	Configure			Trop Path

3) The newly configured monitoring should already be shown. Locate the uptime monitor and click on "Configure"





4) Navigate to the tab "System Accounts", select the row of type "ssh\_login" and enter username and password. Then, click the OK button.



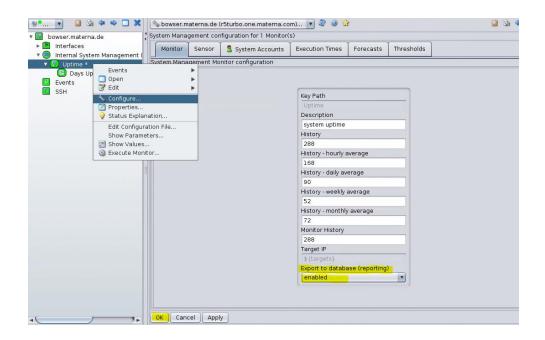
The configuration is now complete. You can check if it is working by right clicking the monitor and selecting "Execute Monitor". It should show something like this:

bowser.mate	🙆 🏟 🌳	🚳 bowser.materna.de Uptime/Days Up<>Execute Monitor 💌 😒
<ul> <li>bowser.materna.d</li> <li>Interfaces</li> </ul>		
55H	<ul> <li>Edit</li> <li>Properties</li> <li>Status Explanation</li> <li>Disable Events</li> <li>Execute Monitor</li> </ul>	12:31pm up 527 days 1:33, 0 users, load average: 0.03, 0.07, 0.08

You can also display the history of measured values by selecting "Show Values". Navigate to the tab "History" and disable the "Show Chart" option to see the text values instead of the graph:

bowser.mate 💌	📋 🍇 🌳 🗳 🗖	🗶 🖉 bowser.materna.de I	Jptime/Days Up<>Show Values 💽	2 🥥 😒			🗋 🗞 🌩 🗢 🗖
bowser.materna.de Interfaces			nd Analysis Status History History	Thresholds			
Internal System I	anagement (r5turbo.one.materna	a.cc Shows the value history	of the parameter				
🔻 😡 Uptime *		Show Chart					Absolute values
🔄 🖸 Days Up		Date	Parameter Status	Days Up		Message	
Events	Events	Nov 20, 2020 11:21:17	AM Normal		527	Days since last restart	
SSH SSH		Nov 20, 2020 11:22:33	AM Normal		527	Days since last restart	
		Nov 20, 2020 11:31:03	AM Normal		527	Days since last restart	
	Properties Status Explanation						
	Disable Events						
	Execute Monitor						
	🚰 Show Values						

If you want to have the data available for the generation of PDF reports, right-click on the uptime monitor and switch "Export to database" to "enabled" and click the OK button



Reports can now be created via the Web UI as shown in the screen shot:

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≡ Q Search		24h <b>31</b> 8h	26 1h 0	64 0 0 7	20 Ø
Host Groups 4 Networks 4 Clusters 1 Services Reporting Reports Templates	PARAMETERS		OR 0 WARNING 0	NORMAL 1 OTHE	
TechnologiesOpenScape Voice2OpenScape 400033NetworkTopologyTreeMonitoringHosts2Monitor TypesProfilesAgents					<ul> <li>Acknowledge 10/1)</li> <li>Events (1)</li> <li>Execute Monitor (1)</li> <li>Report (1)</li> </ul>
Monitors Parameters	<b>1</b> /1(100)				

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